

Work Order ID 58634

Wednesday, May 12, 2010 1:19:03 PM



Page 1

Item ID: D3689-1

Accept



Setup Start



Revision ID:

Item Name: SLEEVE

Stop



Start Date: 5/13/2010 Start Qty: 20.00



Cust Item ID:

Required Date: 5/21/2010 Req'd Qty: 20.00



Customer:

Reference:

Approvals:

Process Plan: *MP*Date: *10-5-10*

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

D3689

Rev B

100

0.00



DOOSAN LATHE

Doosan

Memo

0.00

Doosan Lathe

1- Turn as per Folio FA722 Rev: *AA* & Dwg D3689 Rev: *B*
2-CHECK THREAD WITH GO-NO GO GAUGE DT9450 A & B
3-Deburr per dwg D3689

110

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

120

0.00



CONVENTIONAL MILLING MACHINE

Mill Conv

Memo

0.00

Conventional Milling Machine

C'sink .188" holes as per dwg D3689

SL 10/06/10 (20)

SL 10/06/10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130



QC

Quality Control

QC2- Inspect parts off machine FAI/FAIB

0.00

SL 10/06/14

Memo

0.00

140



QC

Quality Control

QC8- Inspect parts - second check

0.00

SL 10/06/14

Memo

0.00

.. 20 0

150



Purchasing

Purchasing

PURCHASING

0.00

Memo

0.00

Issue P/O: 12121
LPI Per ASTM 1417 LEVEL 2
Certificate of conformaty is required

CZ 10/6/18 20

W/O:		WORK ORDER CHANGES					
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Cust Item ID:

Required Date: 5/21/2010 Req'd Qty: 20.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160



Packaging

Receive & Inspect for Damage & Mat'l Certs

0.00

Memo

0.00

Packaging

Ensure certificate of conformity is attached

P. 10/6/18 (20)

170



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

M. 10 06 21 (20)

180



Packaging

Packaging

Identify as per dwg & Stock Location:

082

0.00

Memo

0.00

P. 10/6/21 (20)

x20 BB 10/06/14

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start



QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

190

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/06/22 *[Signature]*
UMF 10 -
6-21

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
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NOTE: Date & initial all entries

Picklist Print

Wednesday, May 12, 2010 1:19:02 PM

Page 1

Work Order ID: 58634



Parent Item: D3689-1



Parent Item Name: SLEEVE

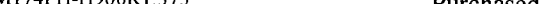

Start Date: 5/13/2010

Required Date: 5/21/2010

Comments: IPP Rev:A New Issue 08-02-11 JLM Verified By:EC
IPP Rev:B Material Change 09-01-07 JLM Verified By:EC
IPP Rev:C Add note on material cutting JLM Verified By:JM

Start Qty: 20.00

Required Qty: 20.00

Component Item ID/	Replacement	Mfg/	Bin	Primary	Last	Route	Unit of	Qty on	Qty per Kit	Qty	Date	Status
M174PH-H900R1.375		Purchased	No			100	f	41.5000	0.5			
												
17-4 SS H900 ROUND BAR 1.375												

Location	Loc Qty	Loc Code
MAT030	41.5	
110540	1.5	
111123	32	
112374	8	

- 7.1 SL 10/06/20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	58634
Description: Sleeve		Part Number:	D3689-1
Inspection Dwg: D3689	Rev: B	Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.90	+/-0.030	1.900	✓			
Ø0.768	+/-0.010	.768	✓			
Ø0.063	+0.005/-0.001	.063	✓			
R0.06	+/-0.030	.030	✓			
3/4-16UNF-2B	N/A	✓	✓			
0.035 x 45°	+/-0.010 x 0.5°	.035x45°	✓			
1.5	+/-0.030	1.500	✓			
1.35	+/-0.030	1.350	✓			
Ø0.188	+0.005/-0.001	.188	✓			
90°	0.5°	90°	✓			
Ø0.250	+/-0.010	.250	✓			
Ø1.075	+0.000/-0.015	1.068	✓			
1.13	+/-0.030	1.121	✓			
4.00	+/-0.030	4.010	✓			

Measured by:	JL
Date:	10/06/12

Audited by:	JS
Date:	10/06/14

Prototype Approval:	N/A
Date:	N/A

Rev	Date	Change	Revised by	Approved
A	09.05.11	New Issue	KJ	JS

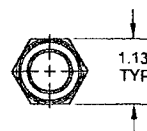
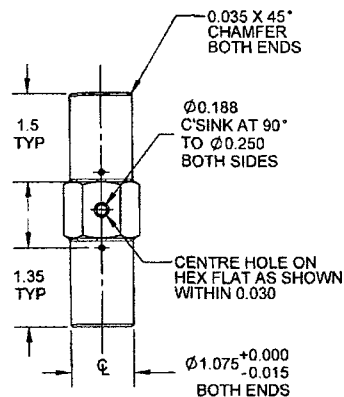
W/O:		WORK ORDER CHANGES					
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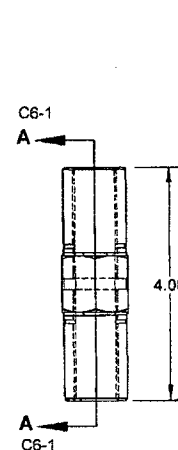
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NOTE: Date & initial all entries



D3689-1 SLEEVE



58634

RELEASED
08/12/15 NHP

- NOTES:**
- 1) MATERIAL: 17-4PH STAINLESS STEEL ROUND BAR PER AMS 5643 H-900 CONDITION
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: NONE
 - 7) WEIGHT: 0.67 lb
 - 8) DIMENSION SHOWN IS MINIMUM DEPTH OF FULL THREAD
 - 9) LPI PER ASTM 1417 LEVEL 2

B	CHANGE TO 17-4PH H-900 (ZN A8-1); REFORMATTED TO CURRENT DWG STANDARDS		RF	08.11.24
A	NEW ISSUE		RF	08.05.22
REV.			BY	DATE
DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
DRAWN	RF			
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV.	
MFG. APPR.	<i>[Signature]</i>	D3689	SHEET 1 OF 1	
APPROVED	<i>[Signature]</i>	TITLE	SCALE	
DE APPR.	<i>[Signature]</i>	SLEEVE	NT	
DATE	08.11.24		COPYRIGHT © 2008 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS UNCLASSIFIED AND IS RELEASED ON THE FOLLOING CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED TO ANY OTHER PERSON WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.</small>	



LIQUID PENETRANT TEST REPORT

P- 15326

CLIENT	DART AEROSPACE	DATE	JUNE 18-2010	PAGE	1	OF	1	
ATTENTION	LINDA	ACUREN JOB NO.	188-10-0769	TIME	AM	<input checked="" type="checkbox"/>	PM	<input type="checkbox"/>
ADDRESS	1270 ABERDEEN ST. HAWKESBURY ON. K6H 1K7	PO/NO No.	[1212] -	WORK LOCATION	MAIN SHOP - HAWKESBURY			
PROJECT	F.P.I. on CROSS TUBES AND MACHINED PARTS							
ITEM(S) EXAMINED	5 - CROSS TUBES 57 - MACHINED PARTS							

JOB DESCRIPTION	PROCEDURE NO. LT-0002	REV./DATE	-	TECHNIQUE NO. LT-TECH2	REV./DATE	-
PART NO.	-		MATERIAL	ALUMINE ALUMINUM THICKNESS		VARIOUS
SCOPE	- WET FLUORESCENT LIQUID PENETRANT INSPECTION CARRIED OUT 100% EXTERNAL					

TEST DETAILS	
METHOD	<input checked="" type="checkbox"/> FLUORESCENT <input type="checkbox"/> VISIBLE
FAMILY BRAND	MAGNA FLUX
PENETRANT	2L 67 MINIMUM DWELL TIME 45 MIN.
PENETRANT REMOVER	170 MINIMUM DRY TIME >10 MIN.
DEVELOPER	SKD 52 MINIMUM DWELL TIME 10 MIN.
DEVELOPER TYPE	<input checked="" type="checkbox"/> NON AQUEOUS <input type="checkbox"/> AQUEOUS <input type="checkbox"/> DRY
WATER WASH <input checked="" type="checkbox"/> SOLVENT REMOVABLE <input type="checkbox"/> POST EMULSIFIED	
BLACK LIGHT S/N 16459 <input type="checkbox"/> OUTPUT > 1000 μ W/cm ² <input type="checkbox"/> AMBIENT < 2 fc	
LIGHTING EQUIP. <input type="checkbox"/> FLASHLIGHT <input type="checkbox"/> TROUBLELIGHT <input type="checkbox"/> OUTPUT > 100 fc @ SURFACE	
OTHER LAB NO	
LIGHT METER S/N 1098866 CAL DUE DATE	
OCT-19-2010	

TEST SURFACE	
SURFACE CONDITION	<input type="checkbox"/> AS GROUND <input type="checkbox"/> AS WELDED <input checked="" type="checkbox"/> MACHINED <input type="checkbox"/> SHOT BLASTED <input checked="" type="checkbox"/> CLEAN BARE METAL
SURFACE TEMPERATURE	<input type="checkbox"/> < -4°C/ 20°F <input type="checkbox"/> -4°C/ 20°F TO 10°C/ 50°F <input checked="" type="checkbox"/> 10°C/ 50°F TO 52°C/ 125°F <input type="checkbox"/> > 52°C/ 125°F

RESULTS- (<input type="checkbox"/> METRIC <input type="checkbox"/> IMPERIAL)
1 - W.O. 59047 - CROSS TUBE ✓
1 - W.O. 59026 - CROSS TUBE ✓
1 - W.O. 59027 - CROSS TUBE ✓
1 - W.O. 59078 - CROSS TUBE ✓
1 - W.O. 59279 - CROSS TUBE ✓
37 - W.O. 58631 - STUDS ✓
20 - W.O. 58634 - SLEEVE'S ✓

Scope of Services

The agreement of Acuren Group Inc. to perform services extends only to those services provided for in writing. Under no circumstances shall such services extend beyond the performance of the requested services. It is expressly understood that all descriptions, comments and expressions reflect the opinions or observations of Acuren Group Inc. based on information and assumptions supplied by the owner/operator and are not intended nor can they be construed as representations or warranties. Acuren Group Inc. is not assuming any responsibilities of the owner/operator and the owner/operator retains complete responsibility for the engineering, manufacture, repair and use decisions as a result of the data or other information provided by Acuren Group Inc. In no event shall Acuren Group Inc.'s liability in respect of the services referred to herein exceed the amount paid for such services.

Standard of Care

In performing the services provided, Acuren Group Inc. uses the degree, care and skill ordinarily exercised under similar circumstances by others performing such services in the same or similar locality. No other warranty, expressed or implied, is made or intended by Acuren Group Inc.

SIGNATURES

CLIENT REPRESENTATIVE	JASON MURDOCK	DTR #	E27415
TECHNICIAN (SIGNATURE):	PRINT	SIGNATURE	
NAME (PRINT):	MIKE SOLTIS	REPORT REVIEWED BY:	
CGSB LEVEL	II	CGSB LEVEL	
CGSB REG. NO.	6606	CGSB REG. NO.	

WHITE - CLIENT COPY

CANARY - OFFICE COPY

PINK - TECHNICIAN COPY

GOLD - OFFICE COPY